

Streaming Receiver Adaptor

Operating Instructions

BKM-FW50

Using the BKM-FW50 Streaming Receiver Adaptor

When not connected to a network

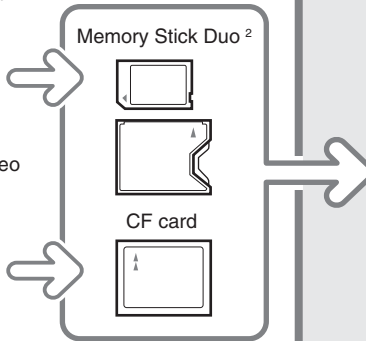
Playback still image or video files from a memory card

Preparations

Take pictures with a digital camera



Copy still image/video files from your computer ¹



☞ “Local Play”
▶ page 16

When connected to a network

Playback still image or video files downloaded from a network

Preparations

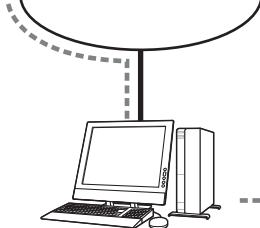
Web/HTTP server³



Upload still image/video files

Download still image/video files from the Web/HTTP server

Network



----- flow of data

View on a Flat Panel Display
To set up ☞ “Streaming Play”
▶ page 14

Save/playback from a CF card
To set up ☞ “Store Local”
▶ page 14

To set up ☞ “Local Play”
▶ page 16

¹ Memory card reader/writer required. ² CF slot adaptor required. ³ Apache and IIS (Internet Information Server) are the only supported servers for downloading and playing back still image and video files.

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Precautions

- The software specifications of this unit are subject to change for improvements without notice.
- Screens shown by application software may differ slightly from the illustrations shown in this manual.
- For safety, connect the port of this unit only to a network where there is no danger of excessive voltage or voltage surges.
- The steps described in this manual are guaranteed only for use under the following environment conditions.

Operating system:

Microsoft Windows XP

Browser:

Microsoft Internet Explorer 6.0 or later

- The following may result in damage to data or damage to the CF (CompactFlash) card or Microdrive:
 - Ejecting a CF card while it is being accessed
 - Placing a Microdrive near a strong magnet
- The Microdrive is a compact hard disk drive. Because it is storage medium utilizing a rotating disk, it is more susceptible to shocks and impact when compared to flash memory devices such as the Memory Stick and the CF card.
- To ensure security on the network, setting a user name and password is recommended. For information on how to make these settings, see the section “Setup screen” (page 25).
- Because the unit reaches high temperatures when placed near the display and used for a long period of time, be careful when removing it from the display.

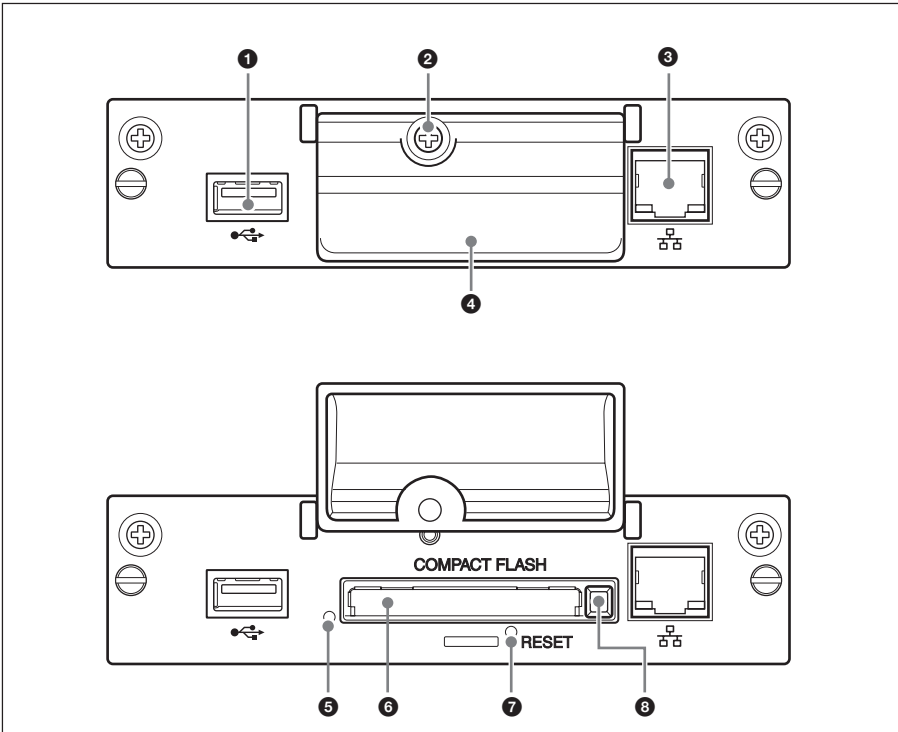
About This Manual

This manual describes use and operation of the BKM-FW50 as installed in a Flat Panel Display of the FWD series and connected to a network.

For information on regular operation of the display, consult the operating instructions of the FWD series product.

-
- Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States of America and/or other countries.
 - CompactFlash and CF card are trademarks of SanDisk USA.
 - Microdrive is a registered trademark of Hitachi Global Storage Technologies.
 - Memory Stick and Memory Stick Duo are trademarks of Sony Corporation.
 - All other product names, company names, etc. mentioned in this manual are trademarks or registered trademarks of their respective owners.

Names and Functions of Parts and Controls



❶ USB port

The port will be used for expanded functions to be introduced in future.

❷ Memory card slot cover fastening screw

❸ Network connector (10BASE-T/100BASE-TX)

Serves to connect the unit to a network, using a 10BASE-T/100BASE-TX LAN cable.

❹ Memory card slot cover

❺ Access indicator

Lights green when a CF card is being accessed by the unit.

Before inserting a CF card, make sure to read "Precautions" on page 4.

❻ Memory card slot

Accepts a CF card or a Microdrive.

❼ RESET button

When this button is pressed and held for more than 3 seconds, all settings of the unit revert to the default condition.


When performing the reset operation, make sure the display on the unit is set to standby.

❽ Eject button

Press this button to remove a CF card from the memory card slot.

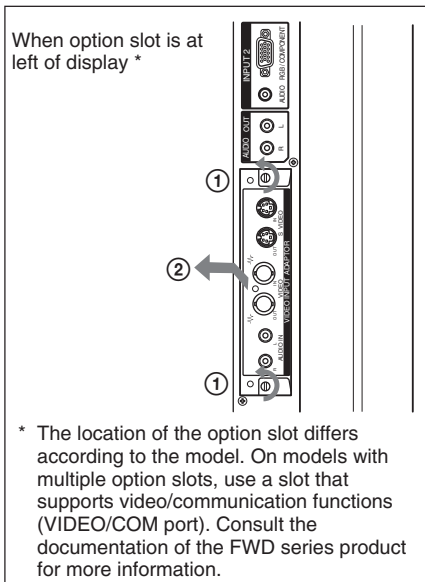
Installation

Before installation

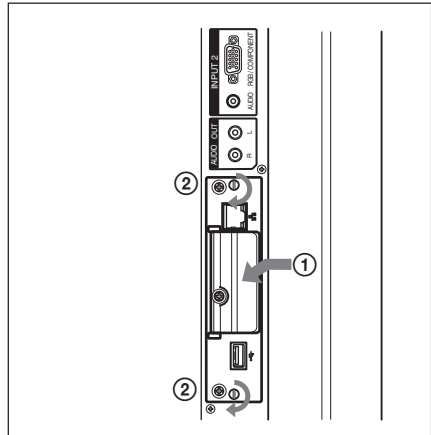
- Turn off power to the display and all other equipment connected to the display. For the display, proceed as follows: press  to put the display into standby mode and then disconnect the power cord from the AC outlet.
- While carrying out the installation, the display must be firmly secured.

Install the BKM-FW50 inside the display as follows.

- 1 If an optional adaptor is installed, loosen its fastening screws (top and bottom) by turning counterclockwise with a flatblade screwdriver and then carefully pull out the adaptor from the display.



- 2 Insert the BKM-FW50 into the display with correct orientation. Make sure that the adaptor is firmly seated in the internal connector of the display. Then tighten the fastening screws (top and bottom) with a flatblade screwdriver and perform the necessary connections.



Caution

Do not touch the connector section

Never touch the connector section inside the display. Otherwise there is a risk of accidents or damage.

Playback of Still Images or Video From a CF Card

The BKM-FW50 is equipped with a memory card slot that accepts CompactFlash cards (not supplied). If you insert a CF card that contains images shot with a digital still camera into the slot of the BKM-FW50, the images can be viewed on the display in a slide show format. You can make various settings for playback of still images or video. For information on how to make these settings, see the section “Computer Operation” (page 11).

Compatible media and file formats

- Media:** CF (CompactFlash) card, Microdrive
- File format:** JPEG format, MPEG2 format etc. (For details, see page 13.)
- Recommended resolutions:**
1360 × 768, 1280 × 768,
1024 × 768
- Maximum resolution*:**
2592 × 1944
- Minimum resolution:**
640 × 480

* The higher the resolution, the longer images take to display.

Notes

- The following may result in damage to data or damage to the CF card or Microdrive:
 - Ejecting a CF card while it is being accessed
 - Placing a Microdrive near a strong magnet
- A CF card, COMPACTVAULT or a Microdrive can be used as storage media for the BKM-FW50.

CF card

- Buffalo: RCF-G256MB (256 MB)
RCF-G512MB (512 MB)
RCF-X64MY (64 MB)
RCF-X256MY (256 MB)
RCF-X512MY (512 MB)

- SanDisk: SDCFB 64M (64 MB)
SDCFB 512M (512 MB)
SDCFH 512MB (512 MB)
SDCFH 2GB (2 GB)

- Hagiwara Sys-Com:
HPC-CF64V (64 MB)
HPC-CF512V (512 MB)
HPC-CF512ZP (512 MB)

COMPACTVAULT

- Sony: RHMD5G (5 GB)

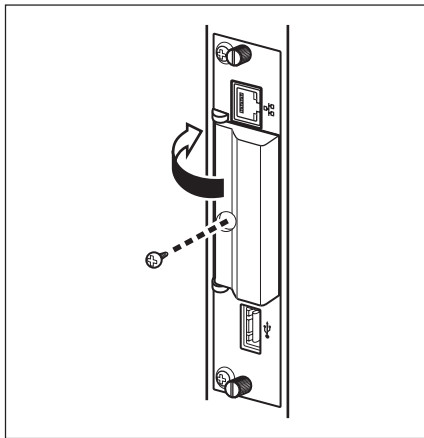
Microdrive

- Hitachi: HMS360402D5CF00 (2 GB)
HMS360604D5CF00 (4 GB)

- Compatibility with CF cards and Microdrives has been confirmed but is not guaranteed for all CF cards and Microdrives.

Inserting a CF card

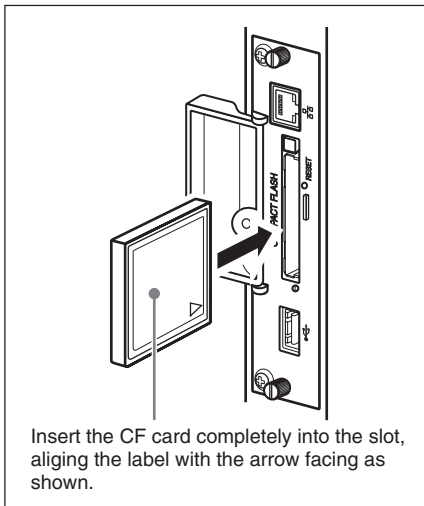
- 1 Remove the memory card slot cover fastening screw with a Phillips screwdriver.



- 2 Open the memory card slot cover and insert the CF card into the memory card slot.

Note

Take care to insert the CF card with correct orientation, as shown in the illustration.



- 3 Replace the memory card slot cover and tighten the fastening screw with a Phillips screwdriver.

Using slide show playback

When a CF card which contains still images taken with a digital still camera is inserted into the BKM-FW50, JPEG format still image files will be automatically detected, and the images will be shown on the display as a slide show. (The input signal for the display must be set to OPTION 1 RGB at this time. For details, consult the operating instructions of the display.) In addition, the BKM-FW50 is set to automatically display any still image or video slide show saved on the CF card, as the factory default.

Note

When inserting a Memory Stick Duo into the BKM-FW50, insert it into a commercially available Memory Stick Duo to CF adaptor first.

Detailed control of playback method

When the display is connected to a network via the BKM-FW50, any still image or video file stored on the CF card can be shown on the display. For information on settings and operation in this case, see the section “Computer Operation” (page 11).

Removing the CF card

Note

When the access indicator is lit, images are being stored or read. Never eject a CF card or turn the power off during this time. Doing so may result in damage to data or the CF card itself.

- 1 Remove the memory card slot cover fastening screw with a Phillips screwdriver.
- 2 Press the eject button to remove the CF card.
- 3 Replace the memory card slot cover and tighten the fastening screw with a Phillips screwdriver.

Preparations for Using the Network Functions

The BKM-FW50 can be connected to a network with 10BASE-T/100BASE-TX LAN cable.

When connected to a LAN, the IP addresses of the BKM-FW50 can be set using one of the following two methods. Consult your network administrator regarding details about IP address selection.

- **Assigning a fixed IP address to the BKM-FW50**

Normally this method should be used.

- **Automatically obtaining an IP address**

If the network to which the BKM-FW50 is connected has a DHCP server, you can have the DHCP server automatically assign an IP address. Note that in this case the IP address will change every time the display in which the BKM-FW50 is installed is turned on.

Assigning a fixed IP address to the BKM-FW50

Note that a separate IP address is necessary for the display control function and for the still image/video playback function. Regarding details of IP address selection, consult your network administrator.

Setting an IP address for the display control function

First, assign an IP address to the display control function, using the following procedure. The IP address assigned in this way is used for calling the display control function of the BKM-FW50 from a computer on the network. Also consult the operating instructions of the display.

- 1 Connect the BKM-FW50 installed in the display to the network, using suitable LAN cable.
- 2 Turn power to the display on and wait for about 30 seconds.

- 3 Press the MENU button on the display to bring up the main menu.
- 4 Use the **↑/↓** buttons to select “INITIAL SETUP/INFORMATION” and press the ENTER button. The “INITIAL SETUP/INFORMATION” menu appears.
- 5 Use the **↑/↓** buttons to select “IP Address Setup” and press the ENTER button.
- 6 Use the **↑/↓** buttons to select “Manual” and press the ENTER button.
- 7 Enter the necessary items.
 - 1) Use the **↑/↓** buttons to select the item to enter manually and press the ENTER button. A cursor appears in the leftmost field of the selected item.
 - 2) Use the **↑/↓** buttons or the numeric buttons on the remote control to enter a three-digit number (0 - 255). When you press the ENTER button or the **➡** button, the cursor moves to the next field on the right. Enter a number in the same way.
 - 3) When all four fields of an item have been set, pressing the ENTER button or the **➡** button confirms the entry for that item.
 - 4) Make settings for the other items in the same way.
- 8 Use the **↑/↓** buttons to select “Execute” and press the ENTER button.

Next, assign an IP address to the still image/video playback function.

Setting an IP address for the still image/video playback function

- 1 Start the browser of the computer (Internet Explorer 6.0 or later).

- 2 Enter the IP address that was assigned to the display control function into the address field, in the format “http://xxx.xxx.xxx.xxx”. Then press the Enter key on the keyboard.
When a user name and password have been set, the “Network Password” screen appears. Enter the user name and password that were set, and then proceed to the next step.
- 3 Click the “Setup” tab.
The “Setup” screen appears. This screen lets you set up the Network Password. The factory default settings are as follows:
Name: root
Password: fw50ad
- 4 Click the “Network” button.
- 5 Under “Internet Protocol (TCP/IP)”, click “Specify an IP address”. Then enter the IP address for the still image/video playback function in the input fields.
- 6 Click “Apply”.

Automatically obtaining an IP address

If you set up the display as described below, an IP address can be assigned automatically by a DHCP server on the network.

- 1 Connect the BKM-FW50 installed in the display to the network, using suitable LAN cable.
- 2 Turn power to the display on and wait for about 30 seconds.
- 3 Press the MENU button on the display to bring up the main menu.

- 4 Use the **↑/↓** buttons to select “INITIAL SETUP/INFORMATION” and press the ENTER button. The “INITIAL SETUP/INFORMATION” menu appears.
- 5 Use the **↑/↓** buttons to select “IP Address Setup” and press the ENTER button.
- 6 Use the **↑/↓** buttons to select “DHCP” and press the ENTER button.
- 7 Use the **↑/↓** buttons to select “Execute” and press the ENTER button.

Note

The IP address may not be obtained correctly, depending on the router being used. Confirm the specifications and operations of the router before use.

Checking the automatically assigned IP address

When an IP address has been automatically assigned, you can call up the display control screen of the BKM-FW50 as follows and check which IP address has been assigned. The IP address changes each time power to the display is turned on. Therefore you must check the IP address as described here every time after turning power to the display off and on again.

- 1 Press the MENU button on the display to bring up the main menu.
- 2 Use the **↑/↓** buttons to select “INITIAL SETUP/INFORMATION” and press the ENTER button. The “INITIAL SETUP/INFORMATION” menu appears.
- 3 Use the **↑/↓** buttons to select “INFORMATION” and press the ENTER button.
- 4 Check the IP address that is displayed in the “IP address” field.

Computer Operation

Controlling the display

You can make various display settings on the screen of the computer. Make sure that the BKM-FW50 is properly installed in the display, and that the BKM-FW50, computer, and router or hub are properly connected with network cable. Then turn on power to the display, the computer, and the router or hub. There are five display screens, divided by function: “Information” screen, “Configure” screen, “Control” screen, “Player” screen, and “Setup” screen.

For details on button functions, consult the operating instructions of the FWD series product.

- 1 Start the browser of the computer (Internet Explorer 6.0 or later).
- 2 Enter the IP address that was assigned to the display control function into the address field, in the format “http://xxx.xxx.xxx.xxx”. Then press the Enter key on the keyboard. When a user name and password have been set, the “Network Password” screen appears. Enter the user name and password that were set, and then proceed to the next step.
- 3 Click the function tab at the top of the screen and select the desired screen.

Setting items on respective screens

Information screen

Information	Configure	Control	Player	Setup
FWD series				

	Closed Caption	OFF		
	PAP	OFF		
	Muting	OFF		
	Operation	415H		
	Contents Player	Idle		
NETWORK				
	IP Address Setup	Auto (DHCP)		
	IP Address (Controller)	192.168.4.202		
	IP Address (Player)	192.168.4.212		
	Subnet Mask	255.255.255.0		
	Default Gateway	192.168.4.15		
	Primary DNS	192.168.4.15		
	Secondary DNS			
	MAC Address	00-01-4A-9B-85-96		
	Speed	Auto Detect		
OTHER				
	IP ROM Ver.	2.33		
	BSP Ver.	2.07		
	CF Remaining Size	1318124/1995616 KB		
Failure Status				
	Digital 3.3V	3.3V		
	Digital 5V	5.2V		
	Analog 5/9V	5.1V		
	Temp1	28°C		
	Temp(P/S)	70°C		
	Digital Power	OK		
	Analog Power	OK		
	Main Power	OK		
	Temperature	OK		
	Fan	OK		
	Backlight	OK		
	Scaler	OK		
	Memory Card	OK		

This screen shows the model name, serial number and other display information, as well as the power status and the input signal selection.

The screen is for information only. There are no items that can be set.

This screen also displays error information.

Information	Configure	Control	Player	Setup
FWD series				

	MainPower	ok		
	Fan	error		
	Backlight	ok		
	Scaler	ok		
	Fan (Player)	ok		
Player Error History				
No.	Error Code	File Name		
1	0x01	xxx.mpg		
2	0x02	yyy.mpg		
3	0x03	zzz.jpg		
[Clear]				
[Refresh]				

For details on error information, see “List of Error Codes” (page 30).

Clear (Delete)

Lets you delete error information displayed in the Player Error History.

Note

Up to 30 errors appear in the Player Error History in the order that they occurred. As new errors occur after this maximum is reached, old error information is deleted, starting with the oldest.

Configure screen



Timer

Lets you make settings for the timer function.

Click “Apply” when done.

Screen Saver

Lets you make settings for the screen saver function.

Click “Apply” when done.

Picture and Picture

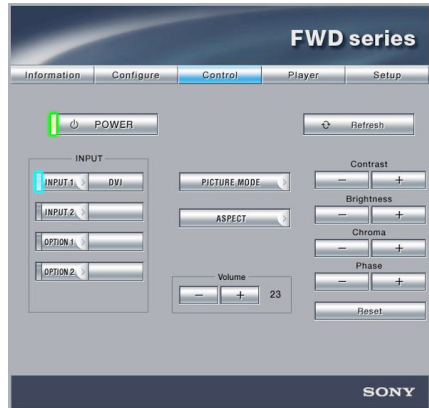
Lets you make settings for the Picture and Picture function.

Click “Apply” when done.

Notes

- For details on these functions, consult the operating instructions of the FWD series product. Not all functions are supported by all display models.
- Before setting the “Timer” function, make sure to configure the time setting on the Setup screen (page 25).

Control screen



POWER

Switches the display on or off.

INPUT

Lets you select the input signal.

PICTURE MODE

Lets you select the picture mode.

ASPECT

Lets you switch the aspect ratio of the image.

CLOSED CAPTION

Lets you control the display of subtitles on the screen.

Volume +/- buttons

Adjust the display volume.

Contrast +/- buttons

Adjust the screen contrast.

Brightness +/- buttons

Adjust the screen brightness.

Chroma +/- buttons

Adjust the color intensity.

Phase +/- buttons

Adjust the color balance.

Reset button

Resets the settings from “Contrast” to “Phase” to their factory default values.

Notes

- For details on each function, refer also to the operating instructions for the display (FWD series).
- Depending on the display model, some functions on this screen may not be available. In addition, some functions may be disabled with some PICTURE MODE settings.
- When no signal is input, adjustments may not be possible with the functions on this screen.

Player screen



This screen lets you make settings for still image and video playback and operate the PC Presentation function of the BKM-FW50.

Supported file formats

The following formats are supported for still image/video playback.

File type	File format	Extension
Still image	JPEG format	jpg, jpe, jpeg
	GIF format	gif
	PNG format	png
	BMP format	bmp
Video*	MPEG2 PS format	mpg, m2v, mpeg
	(Up to 15 Mbps; 480i/480p/576p recommended)	
Audio	MP3 format	mp3

* Format of audio in video files:

- Linear PCM
- MPEG-1 Audio Layer-2 (MP2)
- MPEG-1 Audio Layer-3 (MP3)

Prohibited characters for file names

The following characters cannot be used for file names on this unit. File name data that includes these characters cannot be read:

\ : / * ? " < > | # { } % & ~ ' , ;

About folder sublevels

This unit supports a maximum number of 32 folder sublevels.

Supported servers

The following Web/HTTP server formats are supported:

- Apache
- IIS

The server software must be installed beforehand. For details, consult the respective operating instructions of each server software.

Streaming Play



This screen lets you make settings for display and playback of still image and video files stored on a Web/HTTP server. A maximum of 1,000 files can be downloaded with Store Local. Each file can be no larger than 2 GB in size.

Note

A maximum of 1,000 files are playable with Streaming Play. Each file can be no larger than 2 GB in size.

Server Address

Enter the address of the Web/HTTP server where the still image or video files are stored. When entering the IP address of the server, enter it in the format, “http://xxx.xxx.xxx.xxx” (“xxx” represents a figure no more than three digits).

Play file/folder name

Specifies the location of the still image or video files on the Web/HTTP server specified in the “Server Address” field. You can either enter the location in the text box or click the “Browse” button and select the file or folder location on the screen that appears.

Notes

- If an “index.html” file is stored in the folder, other files and folders contained in the folder are not displayed.
- Only the still images and videos in the specified folder are played. Still images and videos saved in any subfolders are not played.

- Files are played in ASCII code order. Naming files in alphabetical or numerical order is recommended.

Repeat

Select this check box if the still images or video files are to be played back repeatedly.

Save

Saves the settings made on this screen.

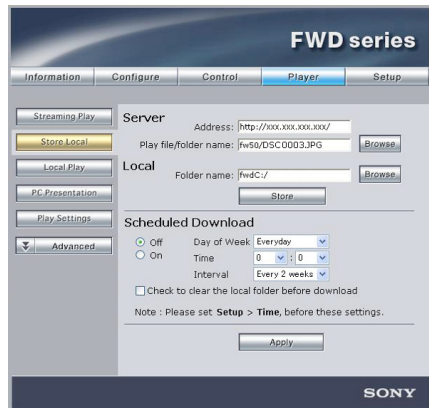
Play

Starts playback of the selected file or of the still image/video files in the folder specified in “Play file/folder name”.

Stop

Stops still image/video playback that was initiated by clicking the “Play” button.

Store Local



This screen lets you download still image/video playback files stored on the Web/HTTP server and save them on a CF card (not supplied) inserted in the memory card slot of the BKM-FW50.

Note

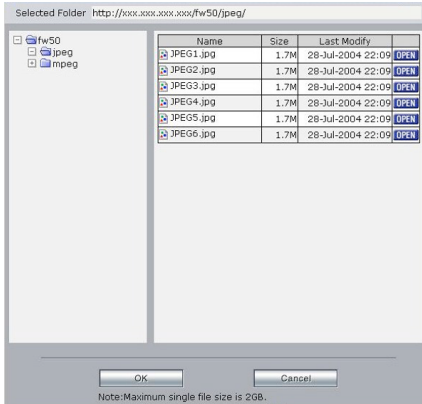
A maximum of 1,000 files can be downloaded with Store Local. Each file can be no larger than 2 GB in size.

Server Address

Enter the IP address of the Web/HTTP server.

Play file/folder name

Specifies the location of the still image or video files on the Web/HTTP server specified in the “Server Address” field. You can either enter the location in the text box or click the “Browse” button and select the file or folder location on the screen that appears.

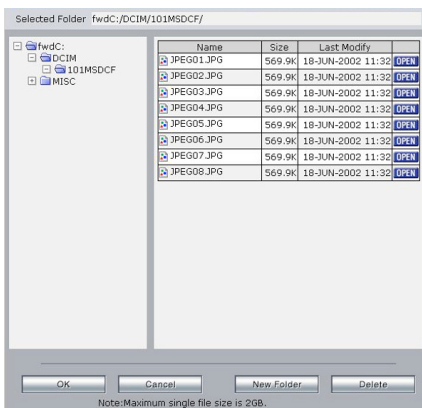


Note

If an “index.html” file is stored in the folder, other files and folders contained in the folder are not displayed.

Folder name

Specifies the save location on the CF card inserted in the memory card slot. You can either enter the location in the text box or click the “Browse” button and select the file or folder location on the screen that appears.



Delete

Deletes a file or folder saved on the memory card inserted in the unit.

New Folder

Creates a new folder on the memory card inserted in the unit.

Store

Starts downloading the still image or video file or the contents of the folder specified in “Play file/folder name”.

Scheduled Download

This function lets you periodically download still image or video files from a Web/HTTP server to an inserted memory card. You can select the day of the week, the time, and the interval.

Check to clear the local folder before download

When you select this check box, all files in the folder on the CF card (specified in “Folder name”) are deleted before downloading starts from the Web/HTTP server. When this check box is not selected, any files on the CF card with the same name as content downloaded from the Web/HTTP server will be overwritten.

Notes

- Before setting the “Scheduled Download” function, make sure to configure the time setting on the Setup screen (page 25).
- When setting the start time for the scheduled download function, select a time when the display will be turned off. If the display is already on when download begins, displaying the image on the screen takes priority over the download. In such a case, a file may not be downloaded properly.
- When setting the start time for download, take the on/off timer setting on the display into consideration, as well as Time Table Play settings (page 23).
- Do not turn the display off while a file is in the process of being downloaded. Doing so may cause the file to be downloaded improperly.
- When there is no space left on the CF card, an error will occur in the Scheduled Download function, and automatic downloading of new content will stop.

Local Play



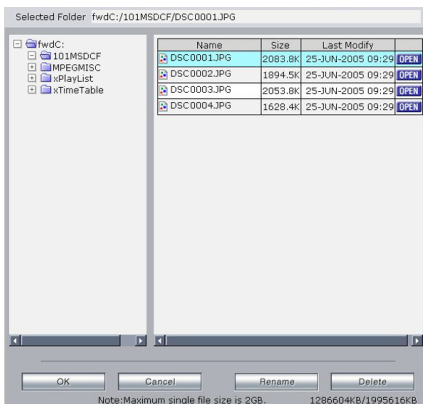
This screen lets you make settings for display and playback of still image and video files stored on a CF card inserted in the memory card slot of the BKM-FW50.

Note

A maximum of 1,000 files are playable with Local Play. Each file can be no larger than 2 GB in size.

Play file/folder name

Specifies the location of the still image or video files on the CF card. You can either enter the location in the text box or click the “Browse” button and select the file or folder location on the screen that appears. When a folder is specified, the still images and videos saved in any subfolders are also played.



Rename

Renames a file or folder saved on the memory card inserted in the unit.

Delete

Deletes a file or folder saved on the memory card inserted in the unit.

Note

Files are played in ASCII code order. Naming files in alphabetical or numerical order is recommended.

Repeat

Select this check box if the still images or video files are to be played back repeatedly.

Save

Saves the settings made on this screen.

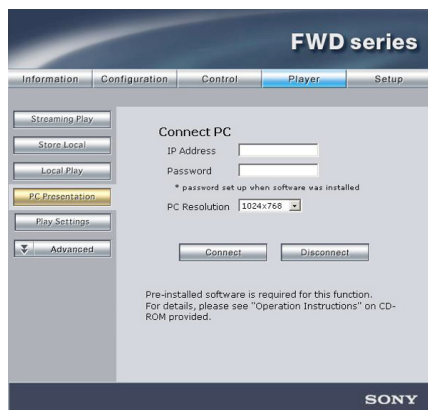
Play

Starts playback of the selected file or of the still image/video files in the folder specified in “Play file/folder name”.

Stop

Stops still image/video playback that was initiated by clicking the “Play” button.

PC Presentation



This screen lets you start and stop the PC Presentation function of the BKM-FW50. By showing the contents of the computer desktop on the display, the PC presentation function allows using the display as an external monitor for the computer.

Note

To enable use of the PC Presentation function, UltraVNC must be installed on the computer. UltraVNC is free software licensed under GNU GPL.

Connect PC

Select this to enable the PC Presentation function of the BKM-FW50. The following items also need to be set.

IP Address:

Enter the IP address of the computer. Enter the IP address in the following format: “xxx.xxx.xxx.xxx” (“xxx” represents a figure no more than three digits)

Password:

Enter the password that was set during the installation of UltraVNC.

PC Resolution:

Select the screen resolution of the connected computer. If the resolution selected here differs from the computer’s actual resolution, the screen will not display at the proper size. Select a resolution so the screen size matches the display.

Connect

Starts the PC Presentation function. When you click this button, the desktop screen of the computer at the specified IP address appears on the display.

Disconnect

Select this to disable the PC Presentation function.

Play Settings



This screen lets you make settings for the slide show function and for automatic display and playback of still image and video files.

Auto Play

This setting specifies whether still image/video file playback should start automatically when the display in which the BKM-FW50 is installed is turned on. In combination with the ON timer of the display, this also allows automatic playback at a scheduled time.

To enable the function, select the “On” setting. From the “Contents” drop-down list, select “Streaming” (automatic playback of still image/video files stored on a computer on the network), “Local” (automatic playback of still image/video files stored on a CF card inserted in the BKM-FW50), or “Play List” (playback of still image/video files in accordance with a previously created play list). “On” is selected as the factory default.

Check to cancel auto play when “Scheduled Download” overlaps

When you are using the Scheduled Download function (page 15) under Store Local on the Player screen, specify whether to give priority to data downloads with the Scheduled Download function or to Auto Play (automatic playback of still image or video files).

When you select this check box, priority is given to data downloads with the Scheduled Download function. If the specified time for Auto Play falls during a download, automatic playback for that day is canceled. When this check box is not selected, Auto Play will begin after data finishes downloading.

Slide Show

The following items can be set for the slide show function.

Interval:

Specifies the time interval until switching to the next still image or video.

Background Music:

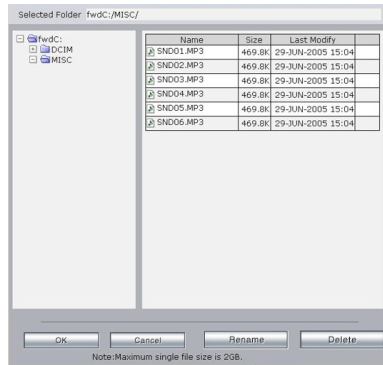
Lets you specify background music to be played during the slide show. Only music files (or folders containing music files) stored on a CF card inserted in the BKM-FW50 can be used for this function. Only the music files in the specified folder are played. (Music files saved in any subfolders are not played.) The background music used for time table playback can be set the from the time table editing screen (page 24).

Notes

When a folder has been specified, pay careful attention to the following points.

- A maximum of 1,000 music files are playable. Each file can be no larger than 2 GB in size.
- Files are played in ASCII code order. Naming files in alphabetical or numerical order is recommended.

You can either enter the file name in the text box, or enter the folder name, click the “Browse” button, and specify the file in the screen that appears.



Rename

Renames a file or folder saved on the memory card inserted in the unit.

Delete

Deletes a file or folder saved on the memory card inserted in the unit.

Check to use background music during video playback (video audio will be muted):

When this check box is selected, Background Music playback will be available while any video files contained in the slide show are played back, but audio included in the video files will be muted.

Check to display still pictures in High Resolution Mode:

When this check box is selected, still images are displayed at high resolution (WXGA or XGA). If the folder includes both video files and still images, the screen turns off for several seconds to switch resolution when changing from a still image to a video (and vice versa).

The following aspect ratios can be selected for the input images.

- 16:9 (WXGA): View 16:9 images in full screen display.
- 4:3 (XGA): View 4:3 images on 4:3 normal screen.
- AUTO: Automatically detects the aspect ratio.

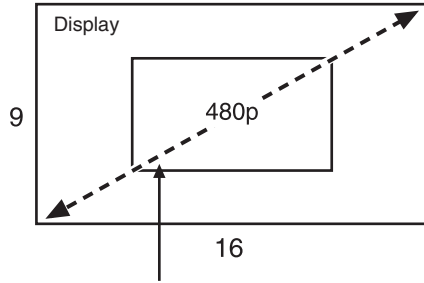
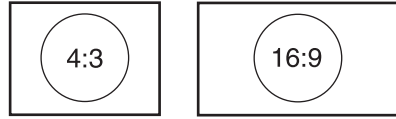
Make selections based on the aspect ratios of the images you wish to view. When viewing still image files, we recommend making the aspect ratios of each file the same.

Notes

- When playing files with mixed aspect ratios, black bars may appear on either side of the display, or the image may be stretched lengthwise.
- Still images with aspect ratios other than 16:9 or 4:3 can also be displayed, but black bars may appear at the top, bottom, and either side of the display, or the image may be stretched lengthwise.
- When the RGB mode on the display is set to DTV mode, the unit automatically enters over scan mode, and any text on the outer edges of an image will be cut off. For the FWD-40LX1/32LX1R/50PX2, set the over scan mode to OFF.

**Standard Resolution Mode
(Default Values): 480p**

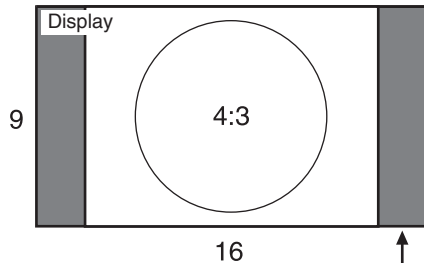
Input still image



Standard resolution

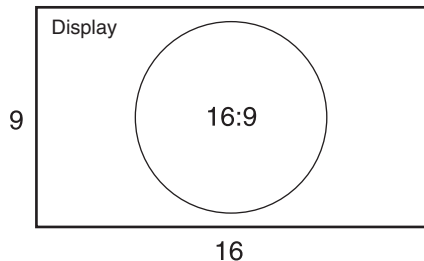
The input still image is converted to standard resolution, and is enlarged according to the aspect ratio of the display.

Display: Full mode



Black bar

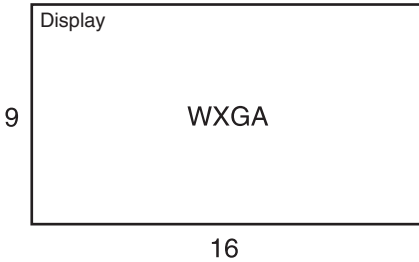
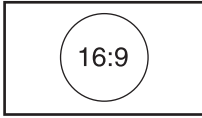
Display: Full mode



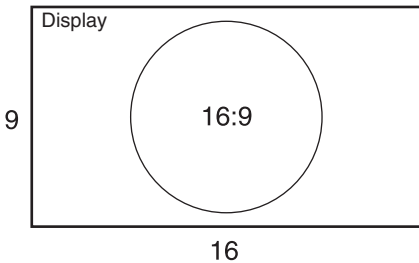
The input still image is displayed in the original aspect ratio.

High Resolution Mode: 16:9 (WXGA)

Input still image



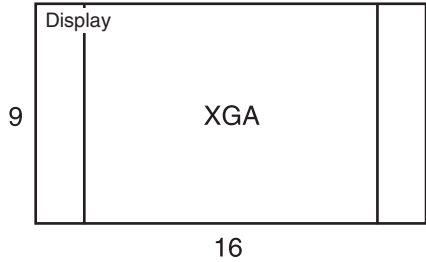
Display: Full mode



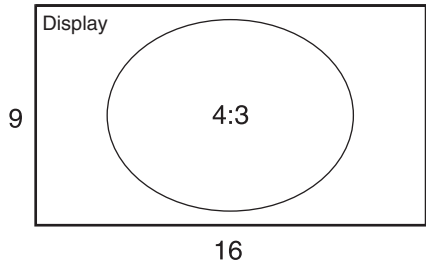
The input still image is displayed in the original aspect ratio.

High resolution mode: 4:3 (XGA)

Input still image

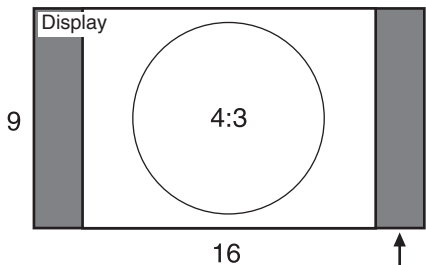


Display: Full mode



The input still image is stretched lengthwise but fills the entire screen.

Display: Normal mode



Black bar

The input still image is displayed in the original aspect ratio.

Video Resolution

Select Auto, NTSC (480i), NTSC (480p), or PAL (576p) as the playback resolution for video.

Guide Message

Specify whether to display a message that enables you to tell the display is turned on when no still images or videos are playing.

Background Color

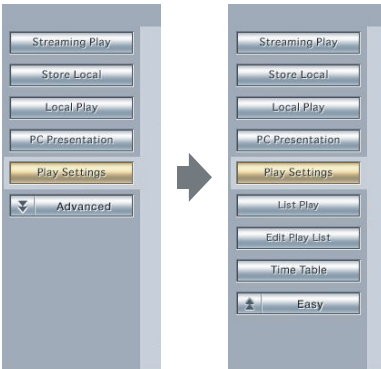
Select “Black,” “Dark Gray,” or “Gray” as the display color to use when no still images or videos are playing.

Apply

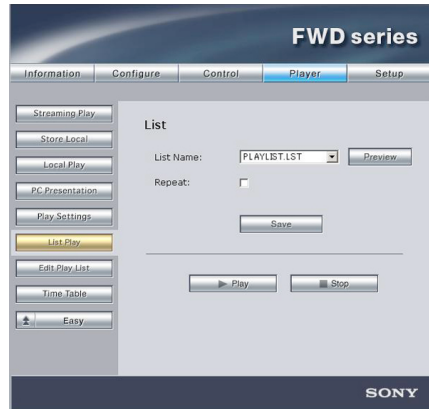
Click here to save the settings.

Player screen (advanced settings)

When you click the “Advanced” button on the Player screen, three buttons —“List Play,” “Edit Play List,” and “Time Table”—appear, allowing you to make more advanced settings for still image and video playback. In this state, the “Advanced” button switches to the “Easy” button, which you can click to hide the three advanced settings buttons.



List Play



This screen lets you select a previously created play list and make settings for playing still image and video files in accordance with the selected play list.

Note

To use the play list playback function, a CF card must be inserted in the memory card slot on the unit.

List Name

Previously created play lists are displayed in the drop-down list. Select a play list for playback.

Preview

Previews the play list currently selected in “List Name.”

Repeat

Select this check box to play back the play list repeatedly.

Save

Saves the settings made on this screen.

Play

Starts playback of the play list selected in “List Name.”

Stop

Stops playback of the play list that was initiated by clicking the “Play” button.

Edit Play List



This screen lets you edit play lists and create new play lists.

Note

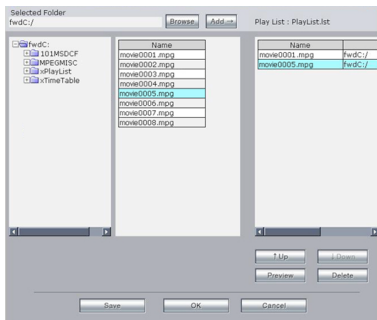
To edit play lists, a CF card must be inserted in the memory card slot on the unit.

Edit Play List

This feature can be used to change the content of previously created play lists. The following buttons are available to perform editing and other tasks on the play list selected in the drop-down list.

Edit

Displays a screen for changing the content of the play list selected in the drop-down list.



On this screen, you can use the following operations to browse for still image and video files to add to the play list.

- To add still image or video files to the play list from the CF card inserted in the memory card slot on the unit, click the “Browse” button without entering anything for “Selected Folder.” The folders on the CF card are displayed in a tree structure on the left side of the screen. Select the folder that contains the still image or video files to be added to the play list.
- To add still image or video files to the play list from a Web/HTTP server, enter the server’s address in “Selected Folder” and then click the “Browse” button. The folders on the server are displayed in a tree structure on the left side of the screen. Select the folder that contains the still image or video files to be added to the play list.

When a folder in the tree structure is selected, the files contained in that folder are listed next to the tree structure. After selecting a file, click the “Add” button and the file will be added to the playlist on the right side of the screen.

You can use the “Up” and “Down” buttons to change the order of files in the play list, the “Preview” button to preview the play list, and the “Delete” button to delete files from the play list. When you have finished editing the play list, click the “OK” button. The play list editing screen closes.

Preview

Displays, in order, a preview of the still image files contained in the play list selected in the drop-down list.

Delete

Deletes the play list selected in the drop-down list from the list.

Download

Downloads the play list selected in the drop-down list from the CF card to the computer. By editing the downloaded play list with a text editor or similar software, you can change the contents of the play list. For details, contact your nearest Sony dealer.

Create New Play List

This feature can be used to create a new play list. Enter a name for the play list in the text box, and then use the following buttons to create the play list.

Create

Displays a screen for editing a new play list. The operations available on this screen are the same as when you click the “Edit” button in the “Edit Play List” section.

Browse

Click this button to specify a play list file that has been saved on the computer.

Upload

Uploads a play list specified with the “Browse” button* to the CF card. The uploaded play list file is added to the drop-down list in the “Edit Play List” section.
* Button name depends on the operating system language.

Time Table



This screen lets you create time tables and configure them to play any still image or video file during any time slot.

Notes

- To use the time table function, a CF card must be inserted in the memory card slot on the unit.

- Before scheduling a time table, make sure to configure the time setting on the Setup screen (page 25).

Time Table Play

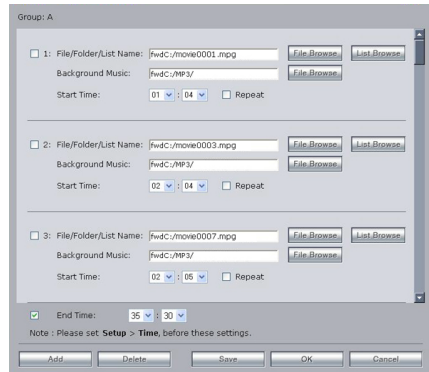
Specifies whether to perform playback by time table.

When performing playback by time table, click “ON” and then set the weekly playback schedule.

Note

When Time Table Play is set to “On,” the timer setting on the main display unit is disabled.

For each day in the time table, specify the data to play back in each time slot. You can create a maximum of seven time tables (A to G) and specify which days of the week to use them on the weekly schedule display. To edit the contents of each time table, click the “Go” button on the right side of the weekly schedule display. The time table editing screen appears.



On the time table editing screen, playback data and settings are listed. For each item in the list, you can specify the save location and background music for the playback data and configure playback start time and repeat settings.

File/Folder/List Name

Specify the save location and file name of the still image or video file to play back. You can also specify a folder where still images or video files are saved.

- To specify still image or video files from the CF card inserted in the memory card slot on the unit, click the “File Browse” button without entering anything in the text box, and specify a file or folder on the screen that appears.
- To specify still image or video files from a Web/HTTP server, enter the server’s address in the text box, click the “File Browse” button, and specify a file or folder on the screen that appears.
- You can also specify a play list (page 21) if you have created one. Click the “List Browse” button, and specify a play list on the screen that appears.

Background Music

You can specify a music file to use as background music when playing back still images. Enter the location of the music file in the text box, or click the “File Browse” button and specify a music file.

Start Time

Specify the time at which playback of the data will start. To play back the data repeatedly, select the “Repeat” check box.

The start time of the first data file is used as the on timer setting on the display.

End Time

If you want playback by time table to end at a certain time, select this check box and specify an end time.

This setting is used as the off timer setting on the display.

Add

Adds a new item to the list of data to play back.

Delete

When the leading check box is selected for items in the list, clicking this button deletes those items from the list.

Save

Saves the settings made on this screen.

When you have finished making settings, click the “OK” button to close the time table editing screen. For each time table you create (A to G), specify which days of the week to use the time table on the weekly schedule display. Each click of a “PLAY” icon on the weekly schedule display turns the specified time table on or off for the specified day of the week.

Operations During Time Table Playback

- When the display is set to Standby, all remaining playback scheduled by time table is canceled for that day.
- Each file can be stopped with the “Stop” button during playback. In this case, time table playback resumes from the next file in the time table at that file’s scheduled start time.
- During time table playback, you can start playback of a different file with the “Play” button. In this case, time table playback resumes from the next file in the time table at that file’s scheduled start time.
- To stop time table playback, set Time Table Play to “Off,” and stop the currently playing file with the “Stop” button.

Note

You can specify a time anywhere in the range of 0:00 to 35:59 (11:59 a.m. the next day) for both the data playback start time and the time table end time. As a result, data set to play back in a time slot on the next day may be superseded by a time table scheduled to start playback that day. Generally, when playback time slots overlap like this, playback scheduled for the current day is always given priority. For details, see “Scheduling playback by time table” (page 33).

Play mode when “Scheduled Download” overlaps

When you are using the Scheduled Download function (page 15) under Store Local on the Player screen, specify “Delay,” “Skip,” or “Cancel” as the action to take when the time scheduled for still image or video file playback by time table overlaps with the time specified with the Scheduled Download function for downloading data.

Delay: Playback of the overlapping content begins after data finishes downloading with the Schedule Download function.

Skip: Only the overlapping content is skipped, and playback begins again from the next scheduled content.

Cancel: All playback by time table for that day is canceled.

Save

Saves the settings made on this screen.

Setup screen



This screen lets you set up the Network Password. The factory default settings are as follows:

Name: root

Password: fw50ad

After you have made any changes or entered information, click “Apply” at the bottom of each screen to enable the settings. Special characters cannot be used in the text fields.

Owner Information

Owner

Enter owner information here.

Display Location

Enter information about the display installation location here.

Note

Do not use spaces when entering the information. Doing so may cause the file name to display incorrectly.

Memo

You can enter auxiliary information here.

Time

Time

Enter the time and the day of the week here.

Network

Internet Protocol (TCP/IP)

Select “Specify an IP address” to enter each value in the IP address’s numeric string. Select “Obtain an IP address (DHCP)” to acquire an IP address automatically from the DHCP server. In this case, be aware that the IP address will change each time the display attached to the BKM-FW50 is turned on.

Note

The BKM-FW50 requires a separate IP address for the display control function and the still image/video playback function. The IP address for the display control function can be set from the menu of the display attached to the BKM-FW50. For details, see “Setting an IP address for the display control function” (page 9).

Password

The administrator and user name and password information can be entered here. The administrator name is fixed to “root”. Each can be a maximum of 8 characters long.

Once a user name and password are set, the “Network Password” screen appears whenever the display control screen of the BKM-FW50 is called up. To ensure security on the network, setting a user name and password is recommended.

Mail Report

When a display function error has occurred, an error report is immediately sent by e-mail (error notification).

However, there is no error notification when an error occurs with the Player.

Address

Enter the target e-mail address here. Up to four addresses can be specified, for simultaneous sending of an error report. The maximum length for each address is 64 characters.

Mail Account

Mail Address:

Enter the allocated mail address here. The maximum length for the address is 64 characters.

Outgoing Mail Server (SMTP):

Enter the mail server address here. The maximum length for the address is 64 characters.

Requires the use of POP Authentication before Send e-mail (POP before SMTP):

If POP authentication is required when connecting to the SMTP server, select this check box.

Incoming Mail Server (POP3):

When POP authentication is used for the “POP before SMTP” setting, enter the POP3 server address here.

Account Name:

Enter the mail account name here.

Password:

Enter the mail password here.

Send Test Mail:

To test whether mail can be sent successfully to the specified address(es), select this check box and click “Apply”. A test mail will be sent.

Note

If any of the following items is not set or not set correctly, an error message appears, and test mail cannot be sent:

- Target address
- Mail account address and mail server address (SMTP)

Advanced

Gives access to advanced settings to enable use of various applications on the network. Make the settings as required by the respective application.

Advertisement

Lets you make settings for the Advertisement and Broadcast functions on the network.

ID Talk

Lets you make settings for the ID Talk function. ID Talk is a protocol that allows network-based control of the display in which the BKM-FW50 is installed.

Controlled items includes various settings and adjustments such as color temperature and gamma. For information about supported ID Talk commands, contact your local Sony dealer.

SNMP

The BKM-FW50 is a network device which supports SNMP (Simple Network Management Protocol). Besides standard MIB-II, Sony Enterprise MIB is also supported. This screen allows making settings for SNMP.

For information about supported SNMP commands, contact your local Sony dealer.

Returning to default settings

To reset all settings made on the Setup screen to the factory default condition, use a thin pointed object to press and hold the RESET button on the front panel of the unit (page 5) for at least 3 seconds.

Troubleshooting

Before requesting service, please check the following points. If the problem persists, contact your local Sony dealer.

Problem	Cause/Remedy
Cannot connect to network.	<ul style="list-style-type: none">• BKM-FW50 is not correctly installed in display. → Push the BKM-FW50 fully into the slot, and tighten the fastening screws.• Cable is not connected correctly to network port. → Plug the cable firmly into the network port.• Network settings are incorrect. → When using a web browser from the computer, check the network settings of the computer. Press and hold the RESET button of the BKM-FW50 for at least 3 seconds to return the unit to the default condition. Then perform setup again.• Cable type is incorrect. → Select a straight cable or a cross-wired cable, as required by the network environment.
Storage medium is not recognized.	<ul style="list-style-type: none">• The storage medium is broken. → Try using a different storage medium.• The storage medium being used is not compatible. → Try using a storage medium from another maker.
Cannot playback files saved on the storage medium.	<ul style="list-style-type: none">• The file formats are incorrect. → Change the files to the appropriate format.• There are over 1,000 files saved on the storage medium. → Remove files until the number of files does not exceed 1,000.• There is a file exceeding 2 GB in size. → Make sure no file exceeds 2 GB in size.• The storage medium is broken. → Try using a different storage medium.

Problem	Cause/Remedy
Cannot save files from a server to local storage.	<ul style="list-style-type: none"> • A storage medium is not inserted in the BKM-FW50. → Insert a storage medium. • The storage medium is broken. → Try using a different storage medium. • There is a problem with the network environment. → Confirm the network settings.
Streaming playback is unavailable.	<ul style="list-style-type: none"> • There is a problem with the network environment. → Confirm the network settings. → There may be a high amount of network traffic. Change the network settings for optimal performance. • The file formats are incorrect. → Change the files to the appropriate format.
The display control screen (the Web screen displaying the unit's GUI) does not display.	<ul style="list-style-type: none"> • Click the refresh or reload button on your Web browser. • Make sure the IP address is correct. • Use Internet Explorer 6.0 or later.

List of Error Codes

When an error occurs while using the BKM-FW50, an error code along with error information is displayed on the Information screen (page 11).

The following explains the meanings of error codes and the methods of dealing with them.

Error code (Hex)	When it occurs	What it means	How to deal with it
0x10	Streaming Play	The specified file/folder does not exist. It may also be that there is an “index.html” file within the specified folder.	Make sure the file/folder you specified exists. Or, move the contents of the folder to a folder that does not contain an “index.html” file, and specify that folder.
0x11		The specified file is of an extension not supported by the BKM-FW50. Playable file extensions include (not case-sensitive): Video: mpg, m2v, mpeg Still image: gif, png, bmp, jpe, jpg, jpeg	Confirm the extension of the file you specified.
0x12		The specified folder does not contain a playable file.	Make sure a file with the appropriate extension exists in the folder.
0x13		The specified file is of a non-playable format.	Confirm the format of the file.
0x14		The specified file (within a folder) is damaged.	Check the file.
0x15		The specified MPEG file (within a folder) is an MPEG1 file.	Check the file.
0x16		A network error has occurred.	Check the network environment.
0x20		An error has occurred with the Player during playback.	Contact your local Sony dealer.
0x30		Local Play	The specified file/folder does not exist.

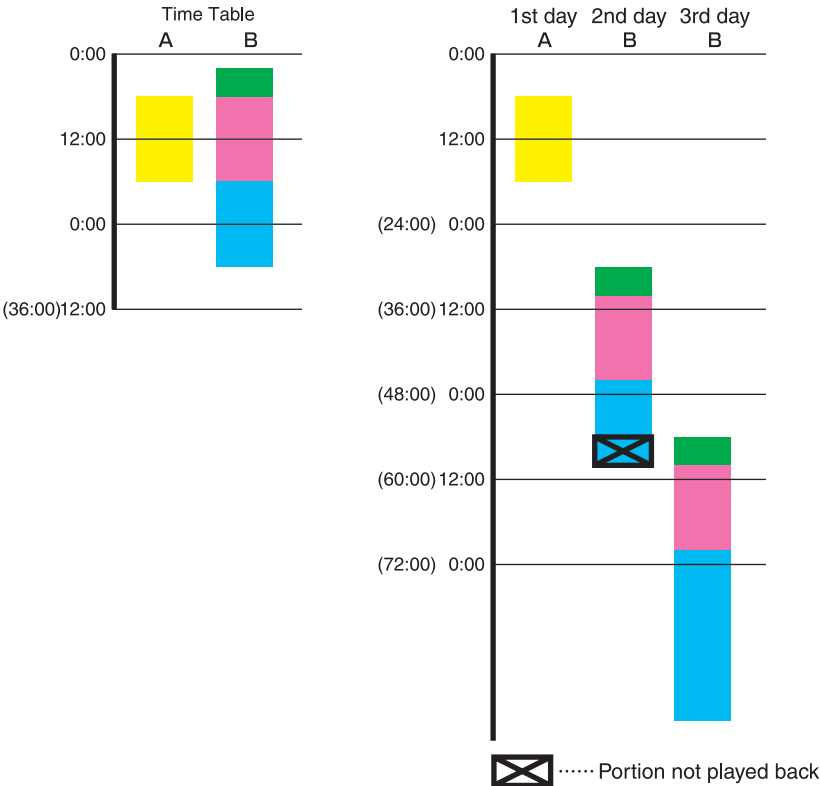
Error code (Hex)	When it occurs	What it means	How to deal with it
0x31	Local Play	The specified file is of an extension not supported by the BKM-FW50. Playable file extensions include (not case-sensitive): Video: mpg, m2v, mpeg Still image: gif, png, bmp, jpe, jpg, jpeg	Confirm the extension of the file you specified.
0x32		The specified folder does not contain a playable file.	Make sure a file with the appropriate extension exists in the folder.
0x33		The specified file is of a non-playable format.	Check the format of the file.
0x34		The specified file (within a folder) is damaged.	Check the file.
0x35		The specified MPEG file (within a folder) is an MPEG1 file.	Check the file.
0x40		An error has occurred with the Player during playback.	Contact your local Sony dealer.
0x50	Store Local	The specified file/folder does not exist in the specified server. It may also be that there is an "index.html" file within the specified folder.	Make sure the file/folder exists at the location you specified. Or, move the contents of the folder to a folder that does not contain an "index.html" file, and specify that folder.
0x51		The folder in the specified server does not contain a downloadable file.	Make sure a file with the appropriate extension exists in the folder.
0x52		The specified file is of an extension not supported by the BKM-FW50. Playable file extensions include (not case-sensitive): Video: mpg, m2v, mpeg Still image: gif, png, bmp, jpe, jpg, jpeg	Confirm the extension of the file you specified.
0x53		The specified folder does not exist on the CF card.	Make sure a CF card is inserted in the memory card slot. Also, check the folders on the CF card.

Error code (Hex)	When it occurs	What it means	How to deal with it
0x54	Store Local	A network error has occurred.	Check the network environment.
0x55		The storage capacity on the CF card is insufficient.	Check the remaining storage capacity of the CF card. Also, delete any unnecessary files/folders on the CF card.
0x56		The file/folder specified to be deleted does not exist.	Make sure the specified file/folder exists on the CF card.
0x57		The file specified to be deleted is currently being accessed.	Before specifying to delete a file, make sure the file is closed.
0x58		The path specified to create a new folder is incorrect.	This error occurs when a new folder that does not exist is specified. Confirm the new folder.
0x59		The file/folder to be renamed does not exist.	Make sure the specified file/folder exists on the CF card.
0x5A		A file/folder already exists with the new name specified for a renamed file/folder.	Specify a different name for the file/folder.
0x70		PC Presentation	A connection error has occurred. (The server does not exist, cannot connect to the network, etc.)
0x71	The user name and password entered are incorrect.		Make sure the user name and password match the ones registered on the server.

Other

Scheduling playback by time table

When you create a time table and perform scheduled playback of still image or video files, some files may not be played back, depending on the content of the schedule. When creating a time table, you can specify any time slot from 0:00 (midnight of the current day) to 35:59 (11:59 a.m. the next day) as the playback time of the still image or video files. If the playback time for certain files is set for the next day (24:00 to 35:59), it may be superseded by the playback time of files scheduled by time table to start that day. As a rule, playback scheduled for the current day is given priority in this case, and files held over from the previous day are not played back.



Note

If the display is set for automatic power off, the display will turn off automatically at the specified time, even if content is playing back.

Specifications

Input/output

Network	10BASE-T/100BASE-TX (connection speeds may differ, depending on the network environment)
Memory card slot	CF Type II
USB	Type A

General

Dimensions (including projecting parts)	135 × 32 × 95 mm (5 ³ / ₈ × 1 ⁵ / ₁₆ × 3 ³ / ₄ inches) (W/H/D)
Mass	Approx. 300 g (10.6 oz.)
Power consumption	Approx. 10 W
Operating temperature	0 to +35°C (+32 to +95°F) (environment conditions for display in which BKM-FW50 is installed)
Storage temperature	-10 to +40°C (+14 to +104°F)
LED indicators	Link (green)/ Act (orange)
Cable length	Max. 100 m (Category 5)

Design and specifications are subject to change without notice.

<http://www.sony.net/>

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